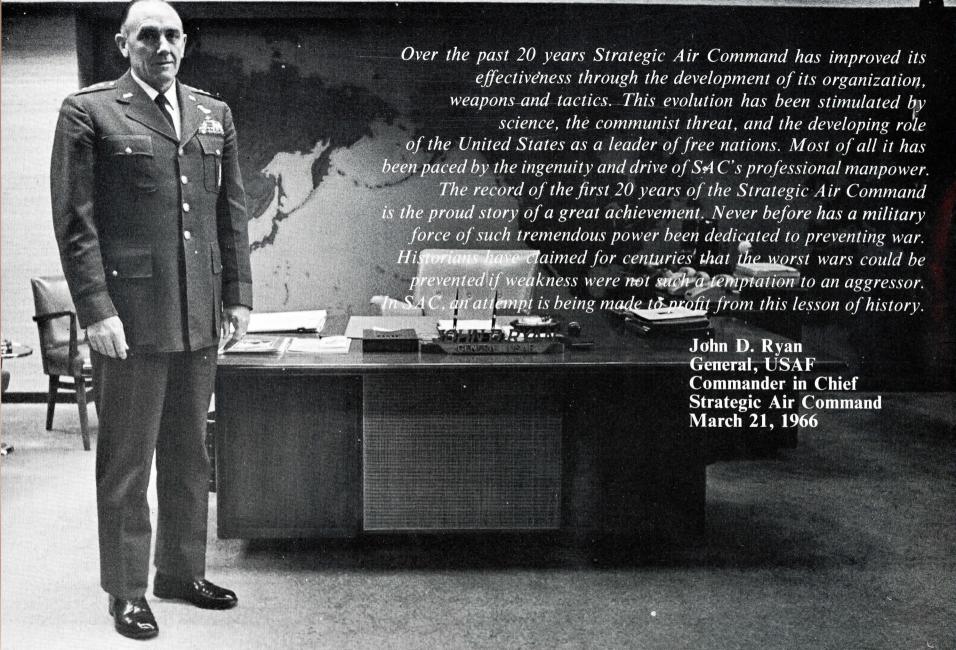
SAC20 SAC20

20th Anniversary Strategic Air Command



# SAC 20

The Story of the United States Air Force's Strategic Air Command

CHAPTER I SAC's Heritage 1918-1946 When the Strategic Air Command was conceived in the final months of World War II, a few farsighted military planners were able to predict fairly clearly the kind of weapons the future would require. The basic science required for advanced nuclear weapons, high-performance jet aircraft and ballistic missiles was a fact. Before the war ended, for example, the technical know-how for the B-36 and B-47 was in hand and the basic theory for intercontinental ballistic missiles was in being.

The post-war political future was not so clear. Some Allied leaders doubted that the spirit of wartime cooperation would continue after the fighting stopped. Most, however, were optimistic. It did not seem possible in early 1945 that the great nations who were, together, defeating the powerful Axis would ever return to the outdated, aggressive nationalism of the pre-war world.

The optimists were almost right. Most of the victorious nations were ready at the war's end to work together for a better world. The Soviet Union was the tragic exception.

This fact was not completely clear to military planners, however, when the wartime U. S. Army Air Forces was attempting—on the edge of victory—to visualize the future shape of United States air power. They were primarily concerned with the purely military problems of organization, mission and weapons.

The Strategic Air Command and its deterrent mission of today is founded, then, on both careful military planning and the experience of World War II.

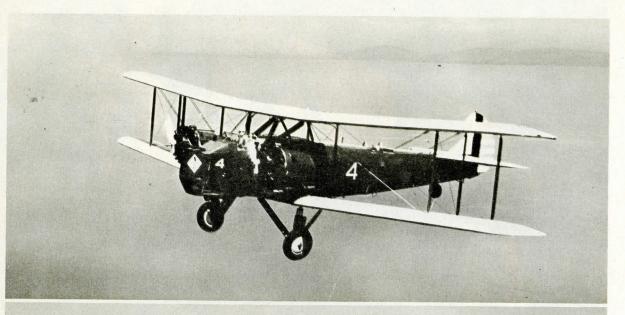
To understand, clearly, the origin of SAC as we know it in the 1960s, you must consider both these factors.

# The Concept of Strategic Bombing

The planning staff of the Army Air Forces'

B-29 bombardier lines up on an enemy target.







#### Keystone B-3 bomber.

Continental Air Forces as they wrote future plans in 1945 had the best evidence possible of the continuing need for a strategic bombing force after the war. Strategic bombing had contributed tremendously toward defeating the Germans in Europe. And, strategic bombing in the Pacific held great promise of making a land and sea invasion of Japan unnecessary. It was obvious that the great military potential of strategic bombing made this mission a fundamental task for air power.

The importance of strategic bombing had not always been so widely accepted. In the years before World War II, only a few men like Brigadier General Billy Mitchell could visualize the potential of the erratic, primitive aircraft of the time. In particular, General Mitchell saw that, while each individual aircraft might have limited fire power, many aircraft when massed together and concentrated on a single target system could strike a devastating blow.

He proved this theory in the St. Mihiel campaign in September 1918, when he concentrated 1,500 aircraft against the German salient.

Earlier in the war, in January 1915, the French had first bombed industrial targets. And, the German Zeppelin raids against London in 1915 pointed to the strategic potential of air power.

The target of these raids, Great Britain, saw the potential most clearly. Within months the Royal Air Force was made a separate service with an independent force within its organization, "for direct action against the heart of the German industrial system."

After the war, the airmen who had seen their weapons develop in four short years from a balky novelty to a significant military force were determined that military aviation should have an important role to play in the future. Men like General Mitchell of the U. S. Army Air Service, General DeHavilland 4-B bomber.

Sir Hugh M. Trenchard of the RAF and an Italian air officer, Giulio Douhet, wrote and worked exhaustively to develop and explain the concept and theory of strategic bombardment.

The theories of these men were studied and discussed widely in the U. S. Army Air Corps, particularly at the Air Corps Tactical School. In the 1920s and 1930s almost every officer who later became a leader of the Army Air Forces in World War II attended the "TAC" School at Maxwell AFB, Ala. One of the most popular instructors at the school during this time was Captain George C. Kenney, the officer who eventually became the first commander of the Strategic Air Command.

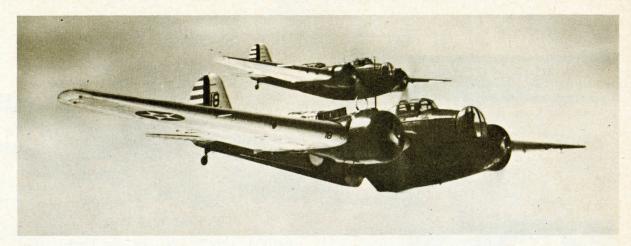
By 1930 the belief that bombardment was the basic arm of an air force was firmly established in the Tactical School. This principle was based on an emphasis on the offensive principle in war—particularly in air war.

It was a simple doctrine.

Enemy forces could be paralyzed in the field if their arms and supplies could be destroyed before they reached the battlefield—before they were manufactured, if possible. Such bombing of enemy industry, communications and basic utilities also would demoralize the entire population and affect the enemy nation's will to continue fighting.

It was this principle that dominated Air Corps planning between the wars and determined the development of new weapons and tactics. So, when the principle of strategic bombing was applied seriously in World War II, the U. S. Army Air Forces was well prepared—at least in doctrine and aircraft design—to prove its point.

The lack of adequate bombing aircraft, at first, had been a difficult problem. General Mitchell discovered in the famous bombing tests against obsolete battleships that only the heaviest bombs could destroy hard targets. And, it also was apparent that bombers large enough to carry such



bombs would have to have great range and adequate speed and firepower to penetrate enemy defenses.

So, in response to this need, the American aviation industry, frequently at great financial risk, pioneered the development of long-range strategic bombing aircraft. Despite controversy with the Navy over the limits of Air Corps coastal defense responsibility, bombing aircraft grew larger, faster and had longer range. Finally, by 1932 the high-speed B-10 placed the bomber ahead of the fastest pursuit aircraft. Then in 1937, when the first four-engine YB-17 was delivered, the Air Corps had a true strategic bomber.

In World War II, this aircraft, in company with RAF bombers in Europe, established the TAC School theory as fact. Their success confirmed plans for the development of higher performance bombers like the B-29 which would contribute so much to the defeat of the Japanese Empire. Without such a heavy, long-range bomb delivery system, the atomic bomb could have remained a scientific marvel, thousands of miles from many enemy targets.

B-10 on an arctic training flight.

In November 1944, President Roosevelt directed that a survey be made by an impartial board to measure the effect of strategic bombing in the European war. Then, a similar survey was ordered by President Truman in 1945 on the effect of strategic bombing in the Pacific war.

Both surveys agreed: strategic bombing had contributed decisively toward winning the war. While no claim was made that bombing alone had won the war, the Pacific war survey concluded that, "control of the air was essential to the success of every major military operation."

The surveys found that, "no nation can long survive the free exploitation of air weapons over its homeland." The Pacific survey further stated that, "it is important fully to grasp the fact that enemy planes enjoying control of the sky over one's head can be as disastrous to one's country as its occupation by physical invasion."

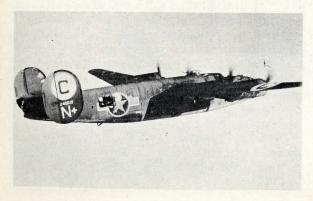
Both the European and Pacific surveys also agreed on the most important lesson to be learned from strategic bombing in World War II. "The lesson to be learned," they said, "in the battered



Martin MB-Bombers.



Brigadier General Billy Mitchell.



cities of England and the ruined cities of Germany is that the best way to win a war is to prevent it from occurring."

"Prevention of war will not be furthered by neglect of strength or lack of foresight or alertness on our part." the Pacific survey concluded. "Those who contemplate evil and aggression find encouragement in such neglect...the United States must have the will and the strength to be a force for peace."

The United States heeded this advice and with a great desire for peace fashioned the strength to be a force for peace. The force had as its main ingredient, the Strategic Air Command.

#### The Post-War World

Early in February 1945, the "Big Three" Allied powers met at Yalta to map plans for world peace that was hoped would follow the war. Both Great Britain and the United States realized at Yalta that the attitude of the Soviet Union was all-important to future plans. Therefore, every attempt was made to eliminate any cause for Soviet distrust or suspicion and win post-war cooperation.

It was also a hard fact that Soviet armies were already within 30 miles of Berlin while other Allied troops had barely entered Germany. In addition, the Pacific war was still in doubt and Russia would make a valuable ally against Japan.

As a result, the Yalta Agreement made every possible concession to the Soviet Union while the Communists, in turn, only conceded the principle of free elections for "liberated peoples." And, in exchange for domination of Manchuria, the U.S.S.R. definitely agreed to enter the war against Japan. Moreover, the general structure of the United Nations was established at Yalta and final plans were made for the San Francisco Conference to set up this organization.

B-24 "Liberator" flying against World War II targets.

The futility of these concessions soon became apparent. Just two weeks after her Yalta pledge to establish democratic governments in liberated nations, Russia threw out the existing peasant government in Rumania and, backed up by Soviet troops, converted that country into a Communist dictatorship. Within another two weeks, similar Russian tactics were begun against Poland—without benefit of "free elections."

At the Potsdam Conference in the summer of 1945, Russian intentions became even clearer. All attempts at constructive agreement were blocked by Soviet quibbling. It finally was demonstrated that wherever the Russian Army dominated, communism would prevail.

For the next few months, French, British and American negotiators in the new United Nations and in dozens of conferences continued to hope that some start could be made toward building a real peace, but every move was blocked by the Soviet Union.

Meanwhile, the United States rapidly began to dismantle its wartime military forces. Our strength dropped in months from over 10 million men under arms to a greatly reduced force whose major mission was processing the departure of citizen soldiers, seamen and airmen back to their homes. Western Europe was a shambles. Allied strength was exhausted, yet still faced the gigantic task of occupation and rebuilding the war torn ruins of their homelands.

The Soviet military, solid in their armed occupation of the ruins of Eastern Europe, began to dismantle what was left of German industry and ship it back to Russia. With their massive Army intact and unchallenged, the Soviet leaders openly overturned government after government and blocked access to their occupied areas with armed force. As Winston Churchill later said, "an iron curtain had descended across the continent."



**Building a Post-War Air Force** 

Soviet treachery was barely evident in early 1946 when plans were being formed for post-war air power and the war in the Pacific had been won.

At the close of the war, U. S. land-based air power was under the direction of the Army Air Forces. Most of its strength was deployed in the various war theaters under the operational command of theater commanders. The major operational unit in the United States was the organization called the Continental Air Forces (CAF). As the "Air Force's Air Force," CAF was primarily a training organization although it also had a combat role in the air defense of the United States.

In response to Headquarters Army Air Forces interest, the CAF submitted a plan to the Pentagon about two weeks after V-J Day that recommended

the formation of a post-war air force centered around a single operational command with the mission of tactical air forces, strategic air forces, and air defense forces.

Other ideas were being considered at Headquarters AAF besides the CAF plan. For example, a memo was sent on Sept. 20, 1945, to Lieutenant General Ira C. Eaker, then Army Air Forces chief of staff, recommending the formation of a "Strategic Striking Force" to be based in the United States, constantly ready and capable of striking anywhere on the globe. Its major weapon would be the atomic bomb.

Anticipating a complete reorganization of U. S. defense forces, Headquarters Army Air Forces made its decision known in a War Department directive dated Mar. 21, 1946. Accordingly, the Continental Air Forces was divided into three

**B-17 Flying Fortress.** 

separate commands: Strategic Air Command, Tactical Air Command and Air Defense Command. Most of the people and resources of the old CAF went to the new SAC.

This then was the environment in which SAC was created: Even at the moment of victory, it was clear that there would be no real peace. The United States and her Allies faced the prospect of, at best, an indefinite "Cold War" with the Soviet Union.

Western Europe was exhausted, the World War II military strength of the United States was almost gone. And, the Soviet Union, stronger than ever, was apparently intent on using the post-war confusion as a golden opportunity for Communist expansion. The only trump card we had was the atomic bomb and the air power to deliver it.

# CHAPTER II The Need for Professionals 1946-1949



A few days before the War Department published an official directive that created the Strategic Air Command, a short note was passed from the Army Air Forces' commander, General Carl Spaatz, to the commander of the Continental Air Forces. It was just one paragraph telling him what his new mission would be.

"The Strategic Air Command," the note said, "will be prepared to conduct long-range offensive operations in any part of the world, either independently or in cooperation with land and naval forces... to conduct maximum range reconnaissance... to provide combat units... to train units and personnel in maintenance of the strategic forces in all parts of the world..."

It was an impressive mission—but at the time ambitious. It would require years of difficult work before the new Strategic Air Command could claim to carry out that mission in the sense we know today.

Of course, SAC could have, at almost any time, assembled a striking force and delivered a few weapons. But, this was not what the mission required. The plain fact is that from 1946 to the Berlin blockade in 1948, political and economic forces were at work in the United States and Europe that made building a military force of any kind almost impossible. It is a great tribute to the skill and determination of Air Force men that the job was done, and in a remarkably short time.

Only professionals could have survived those first few years and laid the foundation for SAC. It was a hard, frustrating task, but it first put the stamp of professionalism on SAC that the command wears today.

# The Burden of Leadership

In 1946, the United States was occupied almost totally with the problems of winding up the war. The guns had stopped but millions of men were

still under arms, and the battered and bankrupt western world was looking to the United States for help.

All this troubled the U. S. government, plus the growing suspicion that the war might not be over after all. In view of the Soviet conduct in Eastern Europe, a new war might start without warning.

But, this fear was submerged in the general rush to rebuild, reconstruct and get back to business.

We had to have a military force to hedge on the chance the Communists could not be trusted. Yet, we also had to demobilize immediately. Public opinion demanded it. And we had to put every spare cent we had into rebuilding a Europe that could protect itself.

So, we conceived and expanded the Marshall Plan, supported the United Nations relief and rehabilitation activities and other reconstruction projects, and pledged to support our wartime allies in every way—including military help.

But, the return to peacetime was straining the U. S. economy. Inflation began and the cost of supporting the rest of the western world was fantastic.

Thus, while military forces, particularly strategic air forces, were an obvious requirement in 1946, '47 and '48, there was little money left for defense and less public support for rearmament of any kind.

# **Defense Reorganization**

In the face of national and international tensions, the defenses of the United States were completely and radically reorganized in July 1947, by the National Security Act. This law united all of the armed forces of the nation—Army, Navy and a new separate Air Force—under control of a single secretary of defense, coordinated by the Joint Chiefs of Staff.

At the same time the military forces were required to tear themselves down and demobilize, they were directed to rebuild and reorganize. Rebuilding was to be accomplished with obsolete World War II weapons, and a relative handful of partly trained men, many of whom were demanding to leave the service. It was a task that almost equalled winning the war.

The Air Force, in particular, experienced difficulty. This was because in separating from the Army, the Air Force had left behind large numbers of trained support people. The volunteers for the new Air Force were mostly operations and maintenance specialists.

The Air Force frankly had little experience in performing many support functions for itself. And, of course, there were few men available of any kind in the rush of airmen to return to civilian life.

Air Force weapon systems and facilities also raised problems. The weapon systems inventory contained many types of aircraft, most in poor repair and without parts, others inaccessable in overseas areas and others suffering from design faults inherited from accelerated wartime development. There was a multitude of large and small bases, too, but many were inadequate, make-shift airstrips and unsuitable for permanent, peacetime operations.

It was, therefore, a time of desperate shortages in the midst of giant surpluses.

Austerity and cost consciousness became watchwords even at a time when the Air Force enjoyed the highest defense priority.

### SAC Before the Berlin Blockade

SAC's first commander, General George C. Kenney, was an officer with a reputation as a strategist and an innovator. He had been an early student of the doctrine of strategic bombing, and



a successful wartime commander of bomber forces. Then, in 1946, he was moved from his post as senior American officer on the Military Staff Committee of the United Nations to command the newly activated Strategic Air Command. His deputy was Major General St. Claire Streett.

Although activated at Bolling AFB, D.C., on March 21, 1946, SAC headquarters moved to Andrews AFB, Md., that October. During those first months, SAC was a command trying to build some sort of order out of the post-war confusion. There were 36,000 men assigned and about 600 aircraft, only about 250 of them bombers. The others were assorted aircraft including just three jet fighters—P-80 "Shooting Stars." Six very heavy bombardment groups and two fighter groups were partially manned at 18 different active installations.

With an unprecedented mission and a sense of immediacy, the SAC staff went to work. One of the first tasks was organizing its untrained, partially equipped random elements into some kind of order. It was a tough job and required major reorganization to get the command structure blocked out.

Essentially, SAC built up two numbered air forces, the 8th and 15th, plus the 311th Air Division, an organization specializing in strategic reconnaissance. On Nov. 1, 1949, the 311th was redesignated as the 2nd Air Force.

First operational consideration was creating an atomic strike force. This was started when the 509th Composite Bomb Group of 15th Air Force was given the tactical atomic mission May 1, 1946. Located at Roswell AFB, N. M., the 509th was SAC's only combat ready atomic delivery unit. In July 1946, this organization furnished most of the air support for the Operation CROSSROADS atomic tests. In these tests, on July 1, 1946, a SAC B-29 of the 509th dropped an atomic bomb General George C. Kenney.

B-29 preflight engine run.

from 30,000 feet on 73 ships off Bikini Atoll—five were sunk and nine badly damaged.

As 1946 ended, the job ahead became clearer. The approach of the SAC staff was this:

First, take the collection of men, aircraft and bases SAC had inherited plus the steady flow of new units and aircraft, and make them into a manageable military force.

Second, build a professional core of highly trained manpower to carry out the peacetime SAC mission.

Third, develop and test new tactics, doctrine and operational concepts to insure "tactical fluidity."

The main difficulty was achieving these objectives with little money and the chronic shortage of personnel plaguing all the military services. As new units and additional bombers were added to SAC, there were few people added to man and operate them.

For example, when the Air Force had to cut its planned group strength from 70 to 55 groups in 1947, a manning ceiling was placed on SAC.



When more units were authorized SAC had to accept the added load with the people at hand. Cross-training, then, became a major effort. Intensive training of all manpower, particularly aircrewmen, occupied the bulk of unit energy and time. It was planned, optimistically, that all pilots would be triple-rated. Units also would use combat crew officers during non-flying time to carry out routine supply, maintenance and administrative tasks.

Under such a program, men worked seven days a week and for as long each day as it took to get the job done. Adequate supply and maintenance were almost impossible. Besides not having the necessary men trained to keep the force flying, the inadequate leftovers of the World War II spare parts stock and lack of an adequate supply pipeline, kept hundreds of aircraft on the ground.

For example, when SAC made its famous "mock-raid" on the city of New York on May 16, 1947, with 101 bombers, this was all that the command could get in the air. Over 80 bombers were left on the ground unable to fly the mission.

The relative handful of men would not be stopped, however. Under the imaginative leadership of General Kenney and the hard driving of Major General Clements McMullen, who had become deputy commander in January 1947, SAC personnel established milestones of achievement and conceived tactics and concepts which are still part of the command today. SAC operations also expanded and increased considerably.

For example, because Air Force doctrine saw the polar region as the air battleground of future wars, SAC's first major training effort was directed at perfecting arctic operations. In two projects, EARDRUM and POLARIS, SAC units surveyed and mapped the polar regions. These were hazardous and difficult missions and a great many hard lessons were learned that later resulted in improved facilities and navigational aids in that area.

SAC pioneered the techniques of cruise control during that time to stretch every possible mile of range from its aircraft.

In 1947, SAC units also began rotating bomb squadrons to the Far East and Europe and flew training and "goodwill" missions to England, Western Germany, Italy, France, Holland, Belgium, Saudi Arabia and South America.

Within the United States, besides the New York practice attack, SAC units also simulated missions against Chicago and Kansas City.

By 1948, SAC's base structure had begun to stabilize, and aircraft strength shifted strongly from medium to heavy (B-29) bombers. SAC also picked up about 120 jet P-80 fighters during this same period. The pressure on people can be illustrated well by noting that SAC had 49,500 people in 1947 manning 15 bases and flying approximately 1,000 aircraft. A year later, with just 3,400 more people, SAC was flying, in addition to the B-29s, two new types of aircraft, the B-36 and B-50. The command was operating from 22 bases, including four in England and others in the Far East and the arctic. Total aircraft strength was still about the same.

Knowing the importance of rapid mobility, General Kenney activated the first strategic support squadron early in 1948. Flying C-45s, C-47s and C-54s, this unit was SAC's own airlift capability and contributed greatly towards helping SAC's widely extended units stay operationally ready.

Two new weapon systems added in 1948 gave SAC a promise of a long-needed boost in range and firepower. The B-36 had been designed during the war to give the Air Force the ability to operate from the United States in case our European bases were lost. The B-50 was also conceived as an improved version of the B-29 bomber to operate over the long ranges of the Pacific. With the shape of the post-war Communist threat becoming

clearer, these two aircraft were a fortunate fall-out from wartime planning. With an even longer look to the future, the all-jet B-47 and B-52 bombers were also on the drawing board when the B-36 and B-50 were first added to the SAC force.

But, new aircraft brought new problems for SAC maintenance and supply. Parts for the big bombers were scarcely in production and aircraft were delivered directly to tactical units without the usual service testing. Although delivered early in 1948, it would be many months before the B-50 and B-36 would make a major contribution to the strategic force.

SAC's fighter force began to shape up during this time. Originally conceived as escorts for SAC bombers, the early fighters lacked range, and many types were tried, including the F-51 and F-82, before the longer-range F-84 proved best for the job.

Even with limited range, however, SAC F-80s made the first west to east transatlantic jet fighter deployment July 16, 1948. On this pioneer flight, 16 SAC F-80s flew from Selfridge AFB, Mich., to Prestwick, Scotland, in nine hours 26 minutes.

During these high-pressure months, SAC also was pioneering a revolutionary concept in bomber operations: inflight refueling. Although only occasionally demonstrated successfully before the war, SAC planners saw the combat potential in refueling bombers in flight. Therefore, in 1948, modification for aerial refueling was begun on both B-29 and B-50 aircraft and by June 30 the atomic-armed 509th and the 43rd Bomb Groups were equipped with refueling squadrons.

The high state of training and readiness of these two units, the most powerful military force in the world at that time, is illustrated by the 43rd and 509th Bomb Groups taking first and second place in the first SAC bombing competition held that June at Castle AFB, Calif.



Lucky Lady II B-50 refueled by a KB-29 tanker en route around the world.

#### SAC and the Berlin Blockade

When the Soviet Army closed the gates of Berlin in the summer of 1948, a fact which had been hard to accept up to then became crystal clear: The Soviet Union was willing to use military force to dominate Europe.

Considering the state of United States and its allies, military preparedness in mid-1948, the decision to use air power was obvious. More remarkable, it was used in two ways that had been conceived in theory, but only barely tested before. First, airlift was used to transport vast amounts of heavy cargo over a sustained period. United States and other Free World aircraft alone kept the city of Berlin fed and heated during the entire fall and winter of 1948 and spring of 1949.

Second, the threat of strategic air power was used as a deterrent to a major ground invasion. At that moment, the deterrent mission of SAC achieved its full stature and U. S. leadership took a new look at its emerging strategic bombing forces.

AF Secretary W. Stuart Symington greets Lucky Lady II crew.



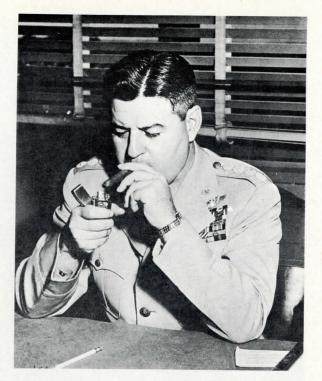
Soviet actions ended speculation about where the threat of war would next originate. From June 1948 until the Korean conflict, Europe was the primary center of SAC training and rotation and the arctic and Far East became secondary.

Among the many actions taken by the United States in response to the Soviet blockade, SAC sent three bomb groups to Europe, placing major Soviet target areas well within B-29 range. The presence of these bombers in Europe with their awesome World War II reputation was a powerful weight in the Free World's favor. Who could doubt what they would do if the Soviet Army were to move west?

During the period of the blockade, SAC's capability was displayed constantly for anybody to see and then draw their own conclusions. In July, SAC B-29s of the 43rd Bomb Group circled the globe. In August, a B-29 of the 301st Bomb Group set a long-distance record of 5,120 miles from Germany to Kansas. In December 1948, a B-36 and B-50 left Carswell AFB, Tex., bound for Hawaii. Both made round-trip nonstop flights. The B-36 of the 7th Bomb Group made the more than 8,000-mile trip without refueling. The B-50 of the 43rd Bomb Group was air refueled three times enroute.

High point in SAC's series of dramatic demonstrations was the 23,452-mile nonstop flight around the world made by the "Lucky Lady II," a B-50 from Davis-Monthan AFB, Ariz., on Feb. 26, 1949. It was a 94 hour, one minute flight made with four inflight refuelings. More than an isolated, maxeffort, this flight dramatized SAC's world-wide refueling and support network and its coordinated, tactical competence. It won SAC its first Mackay trophy.

That spring while the airlift was still supporting Berlin, a new B-36 of the 7th Bomb Group showed its capability by setting a long-distance flight



General Curtis E. LeMay.

record by flying 43 hours, 37 minutes—over 9,600 miles without refueling or landing.

The SAC record flights and long-distance deployments made during the Berlin Blockade were effective weapons in the cold war. They were a constant warning to the Soviet leaders of U. S. military capability during a time when the Communists were deciding what their next step would be.

#### SAC after Berlin

The Berlin Blockade marked a turning point in U. S. national policy. And with it, a milestone for the Strategic Air Command: SAC was from that time recognized as the primary

deterrent to Communist aggression, and had greatly increased importance in international affairs.

Most important for the command was a broad new concept of operations. SAC was no longer primarily engaged in peacetime training—"providing" a strategic bombing force. The first task was operational readiness—"being" a strategic bombing force. "Peacetime" was over as far as SAC was concerned.

General Kenney now concentrated on demonstrating and refining the capability of his nucleus of strategic air power.

For example, regular rotation of SAC units to Europe was begun with full 90-day deployments of entire bomb groups. The first was project LOOKER in which 30 B-29s of the 28th Medium Bomb Wing deployed to Scampton, England, then returned after three months of training. Far Eastern rotation also continued.

While SAC crews were rewriting the record books in the fall of 1948 and practicing their strategic deterrent mission, the command head-quarters moved to Offutt AFB, Neb.

SAC also gained a new commander that October 19, General Curtis E. LeMay. His deputy was Major General Thomas S. Power.

Both these officers had been outstanding combat leaders in B-29 operations against Japan and were well qualified for their task. Both were known for their imagination and planning ability and their skill as managers.

These qualifications almost immediately would be taxed to the limit. Under the post-Berlin national policy, SAC's long-held Air Force priorities began to produce quantities of men and material. In 1949, personnel assigned to the command increased approximately one third. The B-36 and B-50 became fully operational that year and began to replace the older aircraft in significant



B-29 being refueled at RAF Station, Lakenheath, England, Aug. 20, 1948.

numbers. The reconnaissance versions of these aircraft also received engineering approval as the number of reconnaissance aircraft in SAC doubled in 1949.

Strategic support aircraft also doubled as C-97s and C-124 long-range, heavyweight cargo carriers entered the SAC inventory. And, there were six air refueling squadrons now in SAC—triple the 1948 figure.

This sudden expansion and rapid assimilation of new aircraft could have been chaotic, but it was not. With a clear mandate from U. S. national leadership for the foundation of the most powerful military force in history, General LeMay turned his attention toward refining the quality of his command and efficiently channeling his new resources.

He quickly inaugurated a SAC Development Program to set up priorities for the expanding force. To coordinate the increasingly complex maintenance and supply tasks that came with his new weapons, the concept of maintenance control was begun.

To insure the highest quality of professional skill in combat crews, a lead crew school was established to act as a training ground for commandwide standardization of tactics and procedures.

Professional development and management were critical. The national economy was being strained by the commitments to post-war prosperity and world leadership. Military costs and personnel were cut sharply, even while the importance of strong defense forces was being proven.

Manning austerity and cost consciousness were still paramount problems and were apparently going to be around permanently.

# The Achievement of the Early Years

The first years of SAC saw the command assume the character and spirit that would make it out-

Berlin Blockade is lifted.

standing. Under General Kenney, the traditional stress on professional manpower was begun. He also established early in SAC's history the need for flexibility in operations and concepts. And, with General McMullen, he gave the command, from the beginning, a sense of immediacy and drive that has since been one of SAC's most impressive qualities.

These SAC operating principles were largely responsible for the command's successfully meeting the challenge of its first real defense task—deterring a possible Soviet military follow-up to Berlin.

With SAC's atomic capability greatly expanded by the end of 1949, Secretary of the Air Force W. Stuart Symington reconfirmed the basic mission of the command. "Existence of this strategic atomic force," he said, "is the greatest deterrent in the world today to the start of another global war."



# CHAPTER III Mission: Deter and Fight 1950-1954



Several chains of events that started immediately after the war came to deadly conclusions during the first five years of the "fifties." For one thing, the cold war between the Soviet Union and the Free World became a hot war in Korea. For another, the Soviet Union secretly developed and suddenly demonstrated two long-range strategic delivery systems and a hydrogen bomb for them to deliver. These events both profoundly affected U. S. defense policy and gave even greater importance to the deterrent mission of SAC.

While SAC had not prevented the cold war from becoming hot in Korea, it still was carrying out its mission of preventing general war. Seldom in history has a war been more consciously "limited" in scope than the war in Korea.

#### The End of the Cold War

Still recovering after the Berlin crisis, our European allies recognized U. S. leadership in opposing the spread of communism, and even encouraged it. The United States had the money, strength and motive for leadership and the Europeans were glad to be "followers" in such a potentially expensive conflict.

Also, the United States was willing. In signing the precedent-breaking North Atlantic Treaty April 4, 1949, we ended almost 200 years of "nonentanglement" with Europe and set the stage for a multi-national NATO military force. This show of allied common resolve, backed up by armed force including SAC bombers on rotation in Germany, undoubtedly convinced Premier Stalin that the Berlin Blockade was having an opposite effect to the one he intended.

But, the Communists were not to be discouraged so easily. Their doctrine did not predict quick success and the post-war world was full of potential trouble spots waiting to be stirred up.

B-36 maintenance.

The military stand-off at Berlin was just the first move in a new and "warmer" stage of the cold war. The next stage was to be more decisive, and test U. S. ability to stay firm in the face of combat losses.

This testing ground was the Korean conflict, a long expensive war that took the lives of 33,629 Americans.

It was an unusual war for the United States Air Force because it was fought to achieve limited, specific objectives that forced strict limits on the ways that U. S. air power could be used. It was also unusual because armistice negotiations were in progress for two of its three years.

# SAC Bombers in Korea

At the end of World War II, Japan's 40-year possession of Korea was ended. Both American and Soviet troops then temporarily occupied the small country separated by the 38th parallel. In their northern zone, the Soviets set up a puppet Communist government and trained a Communist army to support it. All efforts to establish a free government were blocked by the Russians who eventually even vetoed the admission of a free South Korea to the United Nations.

After nearly four years of expensive occupation, American troops withdrew from South Korea about the time the Berlin Blockade ended in May 1949. Just over one year later, a North Korean army, Russian-trained and Russian-equipped, suddenly attacked United Nations-sponsored South Korea across the 38th parallel.

Within two days, President Truman ordered U. S. air, ground and naval forces to resist the aggression and the United Nations Security Council called on the member nations for military assistance. There was no Soviet veto because the Russians had walked out of the UN Security

B-29 crew completes a Korean Conflict bombing mission.

Council when Red China had been earlier refused a UN seat.

In nine days after being alerted at March AFB, Calif., July 1, 1950, the 22nd and 92nd Bomb Groups flew their first mission against the Communists. SAC mobility training paid off.

Strategic Air Command units were under the operational direction of the Far East Air Forces Bomber Command in Korea until 1953. These units took just three months to destroy every strategic industrial target in North Korea—with conventional bombs. In all, SAC B-29s flew 21,328



combat sorties to deliver 167,000 tons of bombs on Communist targets. With no industrial targets left, B-29 bombers systematically destroyed transportation lines, enemy air fields, and even flew close support missions.

These strategic bombers were prevented from bombing Red Chinese industry supplying North Korea by a U. S. policy to limit the war to Korean soil. And, they were also restrained by a U. S. national policy of restricting the use of even tactical atomic weapons. Therefore, while B-29s played a key role in the Korean war their use cannot be called in any sense a test of modern strategic bombing. However, their employment did prove the flexibility of SAC training, people and concepts.

SAC units that flew against the North Korean and Chinese Communist forces were the 19th, 92nd, 22nd, 98th and 307th Medium Bomb Wings, the 31st (later redesignated the 91st) Strategic Reconnaissance Squadron, Medium, Photo, and the 27th Fighter Escort Group.

#### **Deterrence Still Comes First**

While the Korean war was a decisive test of U. S. policy of "containment" of Communist expansion, it was not the only defense task of the early fifties, nor was it the most important. Then, as now, the primary mission of all U. S. defense forces was the security of the United States. And, while the Korean conflict was a bloody, expensive war, its combat never threatened that security.

Another threat was far more direct. As Air Force Secretary Thomas K. Finletter stated in a memo to Secretary of Defense George C. Marshall, in March 1951, "... The ability of Strategic Air Command to strike powerful retaliatory blows in response to any attacks against this nation was increased as a matter of urgent necessity and to lessen the possibility that a major war might be

forced upon us." Like other experts, Secretary Marshall feared that the Korean conflict was a Soviet feint to get U. S. forces committed on the other side of the world, then make its major move in Europe.

Thus, the most dangerous potential in the Korean conflict was the possibility that it could grow—"escalate" into a world war—a war which modern Soviet air power would bring direct to American cities and homes.

At least two possibilities could escalate the war—just as they could have the Berlin Blockade.

First, the Free World could fail to stand up to piecemeal Communist aggression and be later forced to fight a desperate war for survival; or second, the Free World could be so weakened by fighting small wars to "contain" communism that a surprise direct attack against the United States might give the Communists a cheap and easy path to their goal of world domination.

These possibilities could not be allowed to happen. As Secretary Finletter suggested, it was SAC's mission, with other American military forces, during the Korean conflict, to prevent them from happening.

### Post Korean Policy

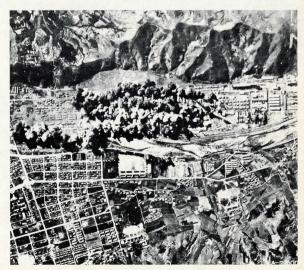
After Korea, even though open fighting had stopped, the threat of direct Communist attack on the United States, either through escalation or by surprise, grew more serious.

In the spring of 1954, military observers at the Moscow Air Show were surprised to see two new Soviet jet bombers fly overhead. They were the same type aircraft as the new SAC B-47 and B-52 bombers. And, their giant engines suggested they might even be superior to the American aircraft.

The Soviets were known at that time to have about 1,000 copies of the B-29. But these aircraft



Ground crew loads bombs on a B-29, February 1953.



B-29 bombs destroy a North Korean magnesium plant, 1950.

lacked the range to be a serious direct threat even with atomic weapons. Following, as they did, a long unsuccessful limited war in Korea, the appearance of new Soviet long-range bombers suggested a Communist change in both capability and strategy.

President Eisenhower was the first United States Chief Executive in our almost 200 year history to face the open threat of sudden destruction, in a matter of minutes, of American cities and homes.

It was clear to President Eisenhower in 1954, that the Soviets had both the nuclear weapons and a pair of high performance delivery systems to carry them when the time was ripe.

Add to this fact the surprising explosion of the first Soviet hydrogen bomb in August 1953—short months after the first U. S. H-bomb test—plus the uncertainty of Soviet intentions after Stalin's death, and you can see why the end of the Korean conflict brought increased U. S. emphasis on strategic forces and nuclear deterrence.

Therefore, both during and after the Korean conflict the biggest part of SAC's efforts and energy was directed at strengthening the United States nuclear deterrent.

# SAC in the Early Fifties

Seldom in the history of the United States have military men worked harder, endured more hardships and pressure, and performed so consistently well as the men of SAC under General LeMay in the years from 1950 to 1955.

As was mentioned, part of the command fought a grueling duel with Soviet MIG-15s in Korea as part of the Far East Air Force. Most SAC units, however, continued the struggle to build a nuclear strike capability strong enough and ready enough to deter a nuclear catastrophe. Both jobs placed tremendous pressure on SAC's nucleus of trained professionals.



The sudden go-ahead given to expand U. S. Air Forces, including SAC, in 1950 resulted in an almost overwhelming flow of raw manpower, materiel, bases and aircraft into the command. Unfortunately, of all these elements, the most critical, manpower, always lagged behind the others. And, even the most experienced men struggled to master new and barely operational aircraft and weapons. As a result, training was intensive and units were chronically undermanned. It appeared that a tradition was being carried on in SAC that each man would always have to do the work of two or more.

92nd Bomb Wing B-36 formation approaches Guam, Dec. 4, 1954.

SAC men, like those of all the military services at that time, frequently carried their workload under difficult, if not impossible, conditions. As new units were activated and assigned to undersized bases, housing was impossible to find, and barracks and other base facilities were often run down and inadequate. In the Arctic, at remote ZI bases, in the African desert and on Pacific islands, men worked under every kind of geographic or climatic handicap.

SAC's basic concept of training and operations caused combat ready wings to rotate to overseas bases every 90 days. This placed a tremendous

strain on the families of crew and direct support personnel. And, even wives were frequently required without notice to throw a bag and the children in the family car and clear out of their base housing during surprise base evacuation exercises.

Military discipline was also tight in SAC. Under the pressure of fighting a war and building an elite military force, SAC personnel worked around the clock and stayed in uniform, even in base movies and clubs.

It was a hard life, but the Strategic Air Command was building a tradition of professionalism, dedication and efficiency that would set a standard for the entire U. S. Air Force.

However, SAC leaders knew that they could not expect men to make the sacrifice required to be in SAC indefinitely without some compensation.

The strenuous training and long work hours were a product of SAC's mission and the war. They could not be changed. But broken-down barracks, poor housing, and the discomfort of inadequate bases could be helped. And, programs, like the SAC Dependent's Assistance Program and others, could be developed to help families whose husbands and fathers were on TDY overseas.

The living conditions of SAC's manpower became one of the primary personal concerns of General LeMay, while SAC's commander in chief. He testified bluntly to the Congress and tirelessly requested that the Air Force and Department of Defense improve base facilities, design and build modern, comfortable barracks, build housing, and expand and improve recreation and educational facilities.

General LeMay also obtained approval, beginning in 1951, to give special "spot" promotions to the next higher grade to men on outstanding "lead" crews. Programs also were begun in the command to improve the quality of SAC's non-

Support personnel are deployed overseas by SAC C-124.



commissioned officers by founding NCO academies. And, then to give SAC's NCOs increased prestige and recognition.

Within the limits of money, resources and the demands of a tough mission, SAC rewarded the dedication of its professionals in every way possible. And they responded by staying. SAC consistently led the Air Force in retaining critical manpower. General LeMay, like every other SAC commander, before or since, knew that the strength of SAC was in its skilled, dedicated manpower. It was the most critical resource he had, and he valued it.

# SAC's Growth: A Controlled Explosion

In 1950, there were 85,000 men in the Strategic Air Command; five years later there were 196,000. In 1950, SAC flew 750 aircraft, mostly B-50s and World War II B-29s. By 1955, there were 3,000 aircraft in SAC, including 1,200 B-47 jet bombers.

These aircraft were operated from 20 bases in 1950. By 1955, SAC had 38 bases in the United States and 13 overseas—in Europe, Africa and the Pacific.

The growth of SAC was the result of the increased threat of a nuclear attack from the Soviet Union. SAC's most important mission in the early fifties, then, was to create a deterrent force that was overwhelmingly superior. Only such a force could provide a safe, deterrent margin.

To create and train such a force and keep it ready for instant action, was a gigantic, unprecedented task.

The wing rotation plan was SAC's fundamental overseas training activity through the fifties. Units deployed for 90 days. During their stay, they conducted training flights from bases they would use in case of war. This plan served to disperse the force and give it increased invulnerability to surprise attack. Also, the presence of SAC bombers

in Europe and the Far East reinforced this country's declaration to remain firm in the face of Soviet aggression. Command elements to supervise this activity were the Seventh Air Division, activated in the United Kingdom in 1951; the Fifth Air Division, activated at Offutt AFB, Neb., and moved to French Morocco also in 1951; and the Third Air Division, activated on Guam in 1954.

SAC's United States facilities also expanded and improved during the early fifties as new units were activated and new aircraft added to the force.

SAC first met the challenge of expansion in March 1950 with a realignment of the Second, Eighth and Fifteenth Air Forces. These organizations lost their special missions (2nd AF had grown out of the 311th Air Division which specialized in reconnaissance, for example) and received across-the-board missions at bases within specific geographical areas. The result of the change was greater flexibility and increased self-sufficiency for each numbered air force.

Without the firm control of such management tools as the improved bomb wing rating system which went into operation in 1951, tight standardization of crew training begun by the Lead Crew School, and the almost continual process of organizational evaluation, the massive build-up could not have been possible without sacrificing strike capability.

In 1951, SAC's wing structure was reorganized to relieve wing commanders from numerous house-keeping and administrative details and allow them to devote full time to building combat readiness. Then, in 1954, wing organization was further streamlined by centralizing air weapons and other armament functions in an armament-electronic squadron.

Such shifting of functions and tight management control were required by the rapid build-up of new and complex weapon systems and the development of demanding new operational tactics.



SAC F-84E fighters complete North Atlantic flight from Texas to Germany, Sept. 18, 1950.

For example, while the B-36 had entered the SAC inventory as early as 1948, it took several years for the giant bombers to reach full operational strength. And, during this transition time the aircraft was modified greatly and improved. In its early years, spare parts were in short supply and a long series of operational tests had to be completed. All this taxed both the crews and maintenance people to the limit.

The same problems, to a smaller degree, came with reconnaissance versions of the B-36 and B-50 when each with its own distinctive and complex systems was added to SAC during this period.

Even more challenging, however, was the increased use of jet engines on the new bombers. The B-36, in modification, picked up four jet engines as an addition to its six conventional engines. And, when the first B-47 was delivered to the 306th Medium Bomb Wing in 1951, SAC was in the jet business in a big way.

The Air Force had been waiting for the B-47 since 1945 when the idea of developing an all-jet medium bomber had been approved. This was a new class of bomber with a small three-man combat crew and a multitude of black boxes to do the routine jobs formerly handled by crewmen on earlier bombers.

It was the fastest bomber in the world, breaking a transatlantic speed record while still in development.

The B-47 strike force grew very quickly. In 1952, for instance, there was a five-fold increase in B-47s assigned to SAC units. This was a year of rapid expansion in all aircraft categories. B-36 strength increased in 1952, and so did the number of SAC F-84s.

The fighter build-up after 1952 was extremely significant because of a decision to convert these aircraft from their fighter-escort mission to the status of first-line nuclear strike aircraft.

Of all the milestones in SAC history, however, none is probably more important than the step-up in aerial refueling that occurred in 1953. It was a big year for refueling.

During this year, SAC KB-50s and KB-29s and new KC-97s continually trained with SAC medium bomb and reconnaissance units. In the fall of 1952, B-47 refueling training reached full stride and the tremendous potential of air-refueled, high-speed jet bombers came within reach.

One significant test of refueling that year earned SAC the 1952 Mackay Trophy. On July 29, an RB-45C of the 91st Strategic Reconnaissance



Observer's compartment of the B-36.

Wing made the first nonstop transpacific jet flight, 4,082 miles in 9 hours 50 minutes, from Elmendorf AFB, Alaska, to Yokota AB, Japan. Two en route air refuelings made the flight possible.

But, the most dramatic application of air refueling was made with SAC fighter aircraft. With new F-84G aircraft capable of being refueled en route by KB-29s and KB-50s, the 31st Fighter Escort Wing made the first successful mass flight of jet fighters from the United States to Japan in July. Fifty-eight jets made the flight from Turner AFB, Ga., to Japan with two en route refuelings by tankers of the 91st Strategic Reconnaissance Wing.

One entire squadron of 20 jets on July 6 flew from Travis AFB, Calif. to Hickam AFB, Hawaii, a distance of 2,408 miles in five hours. For this outstanding achievement, the 31st Fighter Escort Wing was awarded the first Outstanding Unit Award ever presented by the Air Force.

B-47 Stratojet bombers.

The extent of SAC refueling activity is suggested by the record of 43,500 air refueling contacts made from September 1952 to September 1953. SAC tankers transferred 10,500,000 gallons of fuel at a rate of one refueling every 15 minutes, day and night.

Another important SAC activity during the early fifties centered around improving our atomic and nuclear weapons capability. SAC aircraft of almost every type participated in test exercises in the United States and the Pacific sharpening up delivery and damage assessment tactics and generally supporting these activities.

Most significant was the first SAC drop of a nuclear weapon during the IVY test at Eniwetok in the Pacific in November 1952.

An interesting but never fully developed tactic successfully tested during the summer of 1953 was project FICON. This was the culmination of three years of tests in which an F-84 fighter proved capable of launch and recovery from a B-36 in





flight. De-emphasis of the role of fighter escorts and the detrimental effect of the fighter on the bomber's payload, caused the project to be dropped.

#### **Post-Korean Action**

Although the Korean conflict ended the fighting in the Far East, the United States had no illusion that the conflict with communism had ended. The war had taken a heavy toll of American lives and resources and President Dwight D. Eisenhower and his Secretary of State, John Foster Dulles, hoped to carry out a defense policy that would prevent further fighting through deterrence. This policy was to be based on the nuclear capability of the Strategic Air Command.

Therefore, while SAC suffered from the immediate post-war freeze on military construction and a budget and manpower cut, the command's expansion and modernization continued although

at a slower rate.

Because of the

Because of the psychological nature of SAC's deterrent mission, it was imperative that the SAC force be openly demonstrated and well understood by our enemies. Therefore, in addition to the normal heavy training load growing out of SAC's regular routine rotation of units overseas, additional tests and exercises were flown to "show the flag" and shake-down SAC's new aircraft.

For example, in August 1953 in Operation Big Stick, SAC made the first mass flight of B-36 bombers to the Far East, earning the 92nd Bomb Wing the honor of being the second Air Force unit to win the Outstanding Unit Award.

On June 17, 1954, SAC showed its new medium bombers to the Far East for the first time when three B-47 Stratojets of the 22nd Bomb Wing flew from March AFB, Calif., to Yokota AB, Japan, a distance of 6,700 miles in 14 hours 12 minutes.

KC-97 refueling a B-47.

Sentry dogs for security.

In August of that year, the B-47 made its first transatlantic and return nonstop flights in Operation Leap Frog when two bombers of the 308th Bomb Wing, with the aid of air refueling, flew from Hunter AFB, Ga., to French Morocco and returned—a distance of 10,000 miles. This flight gave SAC the Mackay Trophy in 1954. Then in November 1954, a 43rd Bomb Wing B-47 flew a repeated, nonstop pattern between England and North Africa for 47 hours and 35 minutes—a record for distance and endurance.

Meanwhile, in October an entire B-36 wing deployed overseas for the first time when the 92nd Bomb Wing trained for 90 days at Andersen AFB, Guam.

On the whole, more than 1,100 bomber, fighter and tanker aircraft were involved in approximately

40 maneuvers, training exercises and overseas rotations during the first six months of 1954. And, air refueling kept pace—one contact every four and one half minutes around the clock.

The first five years of the decade of the fifties was the period of SAC's greatest expansion and modernization. By the end of that time SAC had phased out its earliest bomber, the B-29, and was well on the way to being an all-jet force. Still short of skilled manpower, the core of professionals who sustained the command had met successfully the challenge of a hard-fought war and built the most powerful military force in history at the same time.

It was obvious to the entire world after the Korean conflict that the United States could not be blackmailed into surrender.



# CHAPTER IV Flexibility, Foresight and Dedication 1955-1959

After the frustration of Korea, the new Communist leadership realized that Stalin had lost his post-war gamble.

Even though the United States had not taken advantage of its short nuclear monopoly, direct and indirect Communist aggression had been blocked successfully across the globe. Therefore, Communist pressure took on a more subtle front during the late fifties. It was a shallow and transparent front, however, as the ugly shape of Communist brutality could not be completely hidden. The unchanged reality of communism was most clear in the Soviet action in crushing the 1956 Hungarian revolt and their instigating the Lebanon crisis.

In the face of a shifting and probing Communist foreign policy during these years, U. S. defense policy was relatively constant. The deterrent strength of the Strategic Air Command remained the cornerstone of U. S. defense forces backing up a broad policy described by Secretary of State John Foster Dulles as "massive retaliation."

The periodic switches in the Communist strategy to friendly promises and "good will" visits made it necessary for the Air Force to rejustify and reconvince the public, Congress and our Allies almost every year that SAC's deterrent strategy was valid and our weapons were efficient and necessary.

### The Consistent Communist Offensive Threat

During the late fifties, the Soviet Union went through its first period of political instability in about 20 years. After Stalin's death in 1953, likely contenders for his supreme position literally scrambled over each other for the job.

With the home-front in turmoil and United States and NATO strength rapidly growing, this period was a poor time for the Communists to

push for a big victory. It was a better time to keep the Free World off balance and plan a giant step forward for tomorrow. Meanwhile, the Soviet planners wanted to steadily build strength. They would also keep a wary eye on the U. S. deterrent while poised to seize on any momentary weakness that might appear.

Soviet technical development supported this plan. Although the new Communist jet bombers unveiled in 1954 were capable of doing their job, one look at the U. S. production capability probably convinced Communist military leaders that Russia could never surpass the U. S. strategic bomber force by a wide enough margin to assure a victory in a nuclear contest.

Therefore, the long-range "Bison" bomber flown in Moscow in 1954, was not placed in full scale production. Instead, the Communists decided to gamble on a break-through in a new weapons field where captured German scientists gave them an advantage—missiles.

This strategy held great promise of working. The Soviets launched the first successful ICBM in August 1957 and about 90 days later placed the first man-made satellite in orbit around the earth.

While the Soviet missile force was being built, the Communist strategic air force was reorganized and made second only to the U. S. Strategic Air Command in strength and performance by a large build-up in "Badger" strength and a new turboprop bomber, the "Bear." The result was a Soviet military threat that continually grew and was steadily and dramatically being modernized—despite the Soviet political scramble and their constantly shifting foreign policy "image."

The United States was under great pressure to respond to any possibility that the Soviets wished a relaxation of tensions. In 1955, when Malenkov resigned as Soviet Premier, N. A. Bulganin and his partner, N. S. Khrushchev, turned on sunny



**B-47** formation

smiles of Soviet friendship and toured the world promising Communist foreign aid to vast crowds of cheering Europeans, Asians and Africans.

In July 1955, with great hopes, the Free World leaders met with the Communists at the Geneva "summit" and many thought the cold war was over at last. The "Spirit of Geneva" became a watchword.

But Mr. Khrushchev's crushing of the Hungarian revolt in 1956 damaged these hopes for peace. And, when the Communists persisted in setting brushfires in the Middle East and Far East, it became clear that the Communist objectives were still the same as ever.

But, the smiling face again replaced the fist

in September 1959. About one week after SAC launched its first operational Atlas ICBM, Mr. Khrushchev visited the United States on a semi-political campaign. The meeting between the President and the Communist leader at Camp David raised hopes once more, although both sides were frozen on real issues. When soon after, President Eisenhower toured 11 countries he was greeted as a hero.

It was a hard blow for those who were again ready to write-off Communist aggression, when the Soviets used the Paris Conference in May 1960 to rattle their new missiles and press hard with their new strategic and psychological edge. When Khrushchev shouted naked threats and hammered his shoe on his desk at the U. N. that summer, it was clear that the time for subtlety was over. Stalin's replacement was decided and the Khrushchev gamble on missiles seemed to be paying off.

#### SAC and the Threat

The Soviet decision to stress missiles in its longrange strategic forces came as no surprise to the United States Air Force. In the early fifties the USAF successfully had recommended development of an ICBM capability of our own.

Both the Soviet and U.S. decisions had an effect on SAC. First, the Strategic Air Command anticipated adding the U.S. ICBM to its other deterrent forces, and second, the appearance of a Soviet ICBM threat caused many changes in the way SAC's bomber force was operated.

The Strategic Air Command had begun extensive planning in both these areas.

For example from the earliest days of missile development, SAC monitored both guided and ballistic missile programs with an eye to later operating these systems. Fortunately, the com-

Hound Dog-equipped B-52 being refueled by a KC-135.





General Thomas S. Power.

mander of the Air Research and Development Command during some of these early years was well prepared to help. He was Lieutenant General Thomas S. Power, who had been General LeMay's first SAC vice commander. This was a very opportune choice for the man to support the development of what was to become SAC's missile force.

General Power was also a good choice to replace General LeMay when he was moved from SAC to become Air Force vice chief of staff. Having commanded ARDC during the development of the early ICBMs, General Power therefore Early model B-52 preflight crew equipment inspection, April 1956.

had a unique understanding of the ICBM threat when he took command of SAC in July 1957.

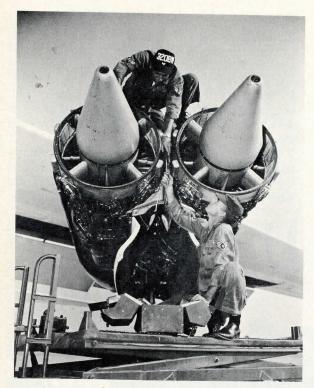
For example, General Power knew the ICBM could strike without warning. So, while waiting for the completion of a defense radar system to give even a few minutes warning, SAC, under General Power's command, even before "Sputnik" flew, conceived new tactics and deployment concepts to enable the deterrent force to survive. The overseas alert of reflex forces soon replaced unit rotations as the basic operational concept.

However, the deterrent mission of the Strategic Air Command did not allow it to suspend oper-

ations while preparing for the new threat and the build-up of SAC's own missile force. The Communist missile threat while ominous was still somewhat in the future. And, deterring aggression was a day-by-day job that could not be delayed. In the mid-fifties, both General LeMay and General Power faced a newly organized modern Soviet bomber force that could strike at any moment.

So, first problems came first, and the primary task of this time was streamlining and modernizing SAC's bomber force. While the ICBMs did have unique capability, they could not match the





B-47 maintenance.

bomber's own special advantages. The Soviets knew this, too, and made no plans to discard their Bison and Badger jet bombers when their missile force was a reality. They continued, in fact, to develop new bombers of better performance at the same time missiles were being developed.

It was a military fact known to all major nations, that a mixed force of bombers and ICBMs would be more effective than either type of weapon alone.

That is why the second half of the fifties was a period of compound transition for the Strategic Air Command—a period of change within change.

# SAC: Young Giant with a Mission

The tremendous spurt in SAC's growth that started at the beginning of the decade began to level off by the end of the fifties. It was a remarkable first 10 years. Not only did the command expand at a rapid rate by acquiring new people, bases and aircraft, but it also continually refocused as it grew. And, while few things were consistent at any time in SAC's history, the late fifties were a period of exceptional change. For example, SAC retired the B-50 in 1955, ended 11 years of fighter operations in 1957 and retired the B-36 in 1959. To replace these obsolete heavy bombers, hundreds of new B-52 Strato Fortresses joined SAC beginning in June 1955.

In fact, despite losing its entire fighter strength and retiring two bomber weapon systems from 1955 to 1959, SAC had more combat aircraft in its inventory by that year than any time before—or since.

New national policies, weapons and concepts also demand more flexible command and control in the late fifties. As the B-52 force grew and "reflex" replaced rotation, wings were reorganized and dispersed. Fewer aircraft on more bases made multiple smaller targets for the new Soviet missiles.

To control such a widely scattered global force, SAC built a new headquarters and control center at Offutt AFB. The building-complex included a command post buried 45 feet underground housing an operations staff, a communications center and global weather central. In case of an attack this complex would be sealed off from the outside world and sustain itself with filtered air, special fresh water wells, emergency power and stored rations for weeks.

Perhaps most important, the Defense Reorganization Act of 1958 made SAC a "specified command" under the direct operational control of

the Secretary of Defense through the Joint Chiefs of Staff.

Also Jan. 1, 1959, the SAC numbered air force base structure was revised along geographic lines. Second Air Force now controlled bases in the Central U.S., Eighth controlled the eastern bases, while Fifteenth Air Force had those in the West.

At this same time, the number of air divisions, originally created in 1951, was increased to make the most efficient operational use of weapons and manpower.

Personnel however continued to be SAC's major problem. Although SAC had a lot of people—over a quarter million by 1958—the expanding and changing force placed a heavy load on SAC's ability to keep them trained and happy. American industry was expanding too in the fifties and there was a tremendous demand outside the Air Force for skilled men.

As a result, converting men trained in obsolete skills and making replacements proficient was a problem that occupied much of the time and attention of SAC commanders from the commander in chief on down. The frequent hard life and duty of the Strategic Air Command was certainly no help in keeping trained men in the force, but those men who stayed were the kind SAC needed most—dedicated men. There has never been any truth in the claim that the "best men were leaving." As far as SAC and General Power were concerned, the "best men" stayed.

Growth and personnel turnover were not the most important elements in the SAC story during the late fifties, however. The most significant changes were the result of the technical breakthrough in rocket development: The full-bore missile programs in both the United States and the Soviet Union produced operational ballistic missiles capable of intercontinental range.

While strategic bombers were certainly not

suddenly useless, no major country would ever plan or operate a strategic air force after 1957 without considering the dramatic capability of the ICBM. And, the Soviet Union made full and frequent use of its early lead in ICBM development to threaten and intimidate the western nations in the numerous crises between free and Communist goals in the late fifties.

# **SAC Responds to Crisis**

The years from 1955 to 1959 were riddled with crises. In between spasms of "co-existence," the Communists stirred up trouble and carefully challenged United States nerve in every quarter of the globe. The United States had to respond to these challenges. First, to demonstrate U. S. determination to both friend and enemy, and second to physically block Communist aggression.

There is no claim that the Strategic Air Command was the only significant military potential used by the United States during these Communist adventures. But, the strength of SAC, when exercised or demonstrated at the right time carried weight in the psychological battles of the fifties. And, when SAC did fly during periods of real or impending crisis there can be no doubt that it was with the full knowledge and consent of our highest government leaders.

Let's review some of the moments of highest tension during the latter half of the fifties and identify SAC operations which coincided with them.

First, SAC increased its deployments to England and made its greatest display of force in that area during the early part of 1955. More wings rotated to the 7th Air Division during the first half of 1955 than in the entire previous 12-month period. This was a period of tension in the Soviet Union as Premier Malenkov resigned and Bulganin and Khrushchev toured Europe and England. It



B-36 formation.



was after this tour, that the Geneva conference was scheduled that later produced what was called "The Spirit of Geneva."

The fall months of 1956 were a period of strain on Free World unity following the Communist action in crushing the Hungarian revolt and the attempt by England and France to seize the nationalized Suez Canal from Egypt. During the time SAC planned and flew operation "Quick Kick" a flight around the edge of North America by eight B-52s of the 93rd and 42nd Bomb Wings. Made nonstop with air refueling, it was a 13,500 mile flight completed in just 31 hours 30 minutes.

In the spring of 1957, the President announced his famous "Eisenhower Doctrine," extending U. S. vital interests to the Middle East. And, in January 1957, SAC flew "Power Flight," a simulated combat mission in which three B-52s flew around the globe, nonstop, in 45 hours 19 minutes, a distance of 24,325 miles, averaging 543 miles per hour. It was a reconfirmation of SAC's ability to hit targets anywhere on the face of the earth.

In the summer of 1957 SAC demonstrated its new B-47s after the 6th Fleet was sent to the Eastern Mediterranean to safeguard U. S. interests following an attempted Communist coup in Jordan. On Aug. 16, a B-47 of the 321st Medium Bomb Wing made a "routine inspection tour" by flying nonstop from Guam to Sidi Slimane AB, French Morocco, in 22 hours 50 minutes.

When the Soviets orbited "Sputnik," the world waited to see what the Soviet Union would do with its new psychological tool.

#### The Lebanon Crisis

The King of Iran was murdered July 14, 1958, and a Communist take-over seemed imminent. Soviet troops were at the nearby Russian border. When the President of Lebanon asked for United Practice alert.

States help under the Eisenhower Doctrine, President Eisenhower took swift action using United States ground, naval and air forces.

Unannounced then, but also of great significance, was President Eisenhower's order to place all SAC forces on alert. Within hours, the most potentially destructive military force in history—over 1,000 bombers—was poised and waiting.

The diplomatic and military measures taken by the United States resulted in a Communist backdown. The Arab nations then sponsored a U.N. Resolution on August 1958 to not interfere in each other's affairs. Therefore, in October 1958, U.S. forces withdrew from Lebanon proving the Communist charges of "U.S. imperialism" to be false.

Hoping to capitalize on the Middle East crisis, the Chinese Communists almost immediately began a heavy artillery bombardment of the islands of Quemoy and Matsu, off the China coast. Again, the United States took prompt action as the 7th Fleet was ordered to the Formosa Strait. During this same period, SAC began training for a continuous airborne alert of loaded B-52 bombers.

The "friendly" face of communism was exposed again in September 1959, when Premier Khrushchev visited the United States. Just before the visit on Sept. 9, 1959, a SAC crew launched the first U. S. operational Atlas ICBM from Vandenberg AFB, Calif.

# SAC and the ICBM

SAC planners were concerned with two kinds of intercontinental ballistic missiles in 1955: Soviet missiles and USAF missiles.

First, SAC's bombers and tankers had to be protected from the no-warning attack that Soviet Premier Khrushchev threatened. If these bombers could be wiped out by a surprise missile strike—



or if the Premier thought they could—the deterrent force would no longer "deter" aggression.

Second, with the first American ICBMs due to be operational soon, SAC needed to pioneer entirely new operational concepts, train men and prepare bases and facilities in a hurry. The pace of this operation is illustrated by the fact that SAC was given responsibility for operating U. S. ballistic missiles on Nov. 29, 1957, and just two years later, the first operational Atlas ICBM was launched.

SAC had launched missiles before. But these were "cruise" missiles. They flew at the same speed and altitude as piloted bombers.

The first 5,000-mile range "Snark" cruise missile unit in SAC was activated Dec. 15, 1957, at Presque Isle AFB, Maine. And, by that time a few B-47 bombers were equipped with "Rascal" missiles that could be air launched toward enemy targets

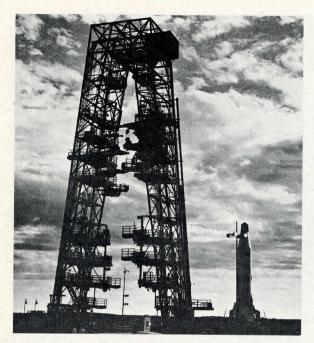
KC-135 Strato Tanker.

as much as a hundred miles away.

SAC had also set up the operational Royal Air Force squadrons manning U. S. developed "Thor" Intermediate Range Ballistic Missiles in England. "Jupiter" IRBMs were also operated by SAC-trained personnel in Italy and Turkey.

But, when the first operational ICBM squadron, the 706th SMS and the 703rd SMS, joined 15th Air Force in 1959, this was the real thing. SAC was in the ICBM business and the "mixed force" of bombers and ICBMs was soon to be a reality.

To keep close tabs on the growth of the SAC ICBM force and its employment, a special segment of SAC headquarters called SAC MIKE was set up in January 1958. The 1st Missile Division had been acquired a year before from ARDC at Camp Cooke, Calif.—later to be famous as Vandenberg AFB.



Early Atlas ICBM on alert at Vandenberg AFB, Calif., October 1959.

Building a real operational ICBM capability would require more years of maximum effort by the Air Research and Development Command, Air Training Command and SAC's own people. Vandenberg AFB, center for SAC's early missile activities, was built almost from scratch to be the key base of SAC missile testing and training. There SAC schools trained crews and support people for all the new missiles, and trained Royal Air Force crews to operate the U. S. developed Thor intermediate range ballistic missiles based in England.

Being in the missile business was a tough life in those days. Camp Cooke was a wilderness with a raw climate, no housing and a back-breaking, around-the-clock schedule. SAC men assigned there lived out of their automobiles and were told not to bring their families for at least a year. It took that long for a crash program to start building family housing. The first group of homes built numbered over 1,000 but housing was still critical.

It was highly technical pioneering for SAC, with top industry and broad Air Force support. These early missile men, many of them from bomber and tanker units, were writing the book as they went along. There were spectacular successes and spectacular failures—both valuable lessons—but knowledge and experience grew rapidly.

Again, as it had been from the beginning, trained manpower was SAC's biggest problem. The military pay raise of 1958 helped keep skilled men in the Air Force but retention continued to tax the best efforts of SAC leadership.

The new look at Air Force retention of 1957 concentrated on holding the most critical men and keeping quality high. Starting in 1957 with retention rates of 34.8 per cent for first-term airmen, 36.7 per cent for technically trained and 82.9 per cent for career NCOs, SAC quality control and retention programs steadily improved. From an overall rate of 45.9 per cent in 1957, the rate went to 64.7 per cent in 1958, then slipped to 61.3 per cent as a tight quality control program eliminated many airmen who did not meet SAC standards.

To reward the professionals who chose to make SAC and the Air Force a career, General Power fought each year at every military and civilian government level for higher pay, more promotions and housing, and better recreation and educational facilities.

# Facing the ICBM Threat

While the emerging SAC missile force was a gigantic problem in management and training, the Soviet missile threat in being was a bigger problem. The bomber and tanker force needed survival in-

surance against the major new risk. Fortunately, the need for tactics to counter the ICBM threat had been anticipated and plans for major changes in the basic operation of SAC's combat aircraft were in progress well before the first Soviet ICBM was launched in 1957.

Early that year, SAC began to test a new concept of deployment designed to shorten reaction time and reduce the number of aircraft at vulnerable forward bases. This was the "reflex" concept. Under this concept only a small number of aircraft were deployed for short periods to the advanced bases. Once deployed, the aircraft and crews were maintained on alert status ready to strike on a moment's notice.

With reflex, the practice of rotating units was brought to an end. It was a welcome change for crewmen who had been deployed overseas for months at a time for more than 10 years.

But, the new concept of keeping aircraft on continued alert had its drawbacks for crews too. The immediate goal was one-third of all combat aircraft on alert at all times. Crews stayed on alert for days at a time away from families, even on their home base. Before long, the work week for combat crews grew to over 74 hours.

Aircraft on alert, then as today, were prepared to take off in less time than the few minutes warning expected before a missile strike. To insure that a launch for survival could not result in an unauthorized attack on planned targets, careful and redundant "positive control" procedures and communications were developed in 1958. Under positive control, SAC aircraft automatically return to bases before entering enemy defense radar range if no coded voice order is received by radio directing an attack.

Also in 1958, General Thomas S. Power announced that SAC was developing a technique for keeping a portion of the B-52 force in the air continually on "airborne alert."



This expansion of SAC's reflex and alert concepts was made feasible by the new all-jet bomber force of the late fifties. In February 1959, the last propeller driven B-36 left the bomber force without ever dropping a bomb in anger—a successful deterrent weapon system which well earned its name, "The Peacemaker."

On the tanker side, the last propeller-driven KC-97 had been delivered to the Air Force by the end of 1956 and the first KC-135 jet tanker was delivered in June 1957.

General LeMay welcomes "Power Flight" crew after nonstop around the world flight, January 18, 1957.

The all jet KC-135 was ideally mated to the jet B-52 and B-47 bombers. It could refuel jet bombers at their own altitudes and airspeeds instead of forcing the bombers into a time, altitude and fuel consuming slow-down for refueling as the KC-97 did. By the end of 1959, there were 23 KC-135 squadrons operational.

Earlier in 1958, SAC KC-135s had set transatlantic records from New York to London and back, and from Tokyo to the Azores nonstop. Another KC-135 captured the world weight-lifting record from the Russian TU-104A jet transport.

Still earlier, General LeMay, then Air Force vice chief of staff, flew a SAC KC-135 on a goodwill flight nonstop 16,350 miles from Westover AFB, Mass., to Buenos Aires, Argentina.

The all-jet bomber and tanker team was promising to be a more than equal working partner for the ICBM in the mixed force that would come in the sixties.

# CHAPTER V Deterrence and Close Support 1960-1966

When 29 Strategic Air Command B-52s dropped about a million pounds of iron bombs on suspected Viet Cong strongholds June 18, 1965, it was the first blow struck by a Strategic Air Command combat crew in over 10 years. And, it was the first time that a veteran of a million or more practice runs and alerts, the B-52, had ever attacked an enemy target.

It might seem that deterrence had failed.

But, deterrence had not failed. There is a great difference between a war of limited arms and limited objectives in Vietnam and a nuclear world war

Soviet Chairman Khrushchev began the decade by arrogantly banging his shoe in the United Nations. The USSR was leading the United States in missiles and space that year. And, Russia organized a separate "Rocket Force" to operate its growing ICBM strength.

Later in the summer, Soviet fighters shot down a SAC RB-47 over the Barents Sea and held the surviving crew members prisoner for a year.

Mr. Khrushchev was confident enough to be genial to the younger, new President of the United States when they met in Vienna.

But, this new President, John F. Kennedy, was no easier to intimidate than his predecessors. So, when the USSR felt the time was ripe in August 1961 to test its missile advantage by making an issue of Berlin, the American and NATO reply was as firm as ever. And, as U. S. reservists and National Guard units were recalled in a sudden mobilization and the SAC strike force settled down to a 50 per cent alert, the Communist "wall" was built in a futile gesture of defiance to the West.

During the early sixties, the Soviet Union built a strategic bomber force second only to the Strategic Air Command, and the Soviet missile force continued to grow. Communist missiles even went to sea in submarines. On Aug. 31, 1961, the Soviets ended an unofficial suspension of nuclear testing by boasting they would test the biggest nuclear devices ever built. And, Oct. 30, 1961, they did. An explosion in Siberia of more than 50 megatons was detected by Free World scientists.

Finally, in apparent contempt for the United States, the Soviet Union began in the autumn of 1962 to use its new Western Hemisphere satellite, Cuba, as a missile base. When the Soviet missiles were detected and verified by Strategic Air Command reconnaissance crews, U. S. action was stronger and more positive than Premier Khrushchev had anticipated.

Within hours the Soviet leader was facing a U.S. Naval quarantine, a massive display of SAC power and other U.S. military strength and readiness.

In 30 days, the missiles were on the way back to Russia and Nikita Khrushchev's days of Communist leadership were numbered.

## China Takes a Leading Role in Communism

The fundamentalist Marxist leaders of Red China had never cared for Premier Khrushchev's reluctance to use his growing power to support "liberation" movements. Russia's apparent concern over the consequences of pushing the United States too far irritated the Chinese Communists. Soviet psychological harrassment of the West was too slow and undramatic to unite a nation of starving Chinese. So, as China grew stronger and more ambitious, Mao Tse Tung and his followers began to challenge Soviet Communist leadership—first in Asia, then later in Africa and Latin America.

Also, China had the same age-old national objective to dominate and rule her neighbors as Russia. Both these traditionally imperialistic



Minuteman combat crew prepares to go on alert.



B-52 prepares for a practice bomb mission.



Titan I elevator lifts missile from its hardened launcher. countries followed much the same foreign policy in the 20th century, under communism, as they had under czars and emperors in centuries before.

However, they had a common border, and, historically common targets for their aggression. Conflict between them was almost inevitable. So, when the Soviet Union lost face in backing down in Cuba, the opportunity for the Chinese Communists to take over world party leadership seemed at hand.

The Red Chinese had followed the Soviet line for years and even fought a war in Korea for the Soviets. Now, armed with the psychological edge of potential nuclear weapons they wanted to direct their own policy of domination. So, in Korea, Malaya, Indonesia, the Philippines, Thailand, Burma and the Geneva-partitioned countries of Vietnam, Laos and Cambodia, Communist movements received new encouragement and grew.

In most cases, these movements were slowed or blocked by prompt political action. But in Vietnam, for example, they successfully resisted even military force.

Vietnam, after the Geneva Conferences of 1954 and 1957, had been divided into free South Vietnam and Communist North Vietnam. But, Communist guerillas persisted in terrorism in an attempt to impose a minority Communist rule, and disrupt free elections in the new and unstable south.

North Vietnam actively supported this illegal terrorist movement and with the Communist Chinese, seemed ready to test Free World determination for once and for all. They apparently had to learn for themselves what the Soviets were discovering after almost 20 years of fruitless crises and expensive military adventures: when the real issues of freedom were at stake, the United States would stand against aggression.

#### The New Look in Deterrence

Like President Eisenhower, President Kennedy found the Soviet Premier to be a hard man with whom to deal. Behind the genial smiles and homey philosophy, the Soviet leader was a brutal and calculating dictator with the power to destroy civilization. Repeatedly, he told the Free World leaders to their faces that he would destroy their governments when the time was right.

President Kennedy knew that facing a powerful Communist nation led by such a man demanded

a strong, steady military and foreign policy.

But the calculated cycle of crises and "coexistence" thrown at the United States also demanded a military force of great flexibility.

President Kennedy believed that the strategic forces of the 1960s should be complemented by a strong conventional force to give him more "options of response" to Communist aggression. The President, therefore, directed in early 1961 both an increase in the SAC alert from one-third to one-half and an increase in conventional Army, Navy and Air Force capability.

To achieve such an expansion of forces without expanding the military budget, required great austerity in military management and careful evaluation of new weapons. So, although all the U. S. military forces had long before instituted successful cost reduction programs and had pioneered modern management methods for years, the new Defense Secretary, Robert McNamara, set out to carry such programs even further.

In new weapons selection and development in particular, Mr. McNamara applied the criterion of "cost effectiveness." Proposed strategic systems like the B-70 and Skybolt missiles were discarded, while others like the Navy's Polaris submarine and Air Force Minuteman ICBM were selected. Still other systems, like SAC's B-47, KC-97 and early ICBMs, were ordered phased out of SAC.

As in previous similar programs, SAC's professional manpower led the Air Force and other services in cost reduction. SAC, in addition, made extraordinary efforts to improve the effectiveness of the combat forces by programs like the "Big R," PRIDE and civilian and military suggestion award programs.

The new look in U. S. military forces received its preliminary test in the Cuban crisis in 1962 and was soon pressed hard as conventional U. S. Naval, Army and Air Forces became dispersed



world-wide by Communist aggression in the months to come.

Later, when President Johnson became convinced that Communist aggression in Vietnam must be stopped, U. S. Forces became more deeply involved in the Vietnam war, and conventional forces were expanded even further.

Meanwhile, to keep costs down, the Department of Defense closed hundreds of military bases in the United States, some of them operated by the Strategic Air Command. Programs to phase out aging systems accelerated as the SAC Minuteman ICBM force approach its peak strength.

Finally, as the mid-sixties began, a new reconnaissance aircraft, the SR-71, and a bomber version of a fighter developed for both the Air Force and Navy, the FB-111, were announced as future SAC systems.

#### SAC's Mission in the '60s

This, then, was the background for SAC's mission in the sixties. As it had been since 1946, the primary mission was still deterring a nuclear war. But, as what the Soviets called "wars of national liberation" became the pattern of Communist aggression, the SAC mission developed several new perspectives.

Most significant of these was what Air Force Chief of Staff General Curtis LeMay termed the concept of the "strategic umbrella." Under the umbrella of strategic forces, U. S. conventional forces could deal with minor Communist aggressions without fear that such actions would lead to a nuclear war. In this way, SAC assisted in giving the President maximum freedom and flexibility in responding to Communist aggression at any level.

To carry out this broad mission, the SAC mixed force reached a level of efficiency and readiness beyond that of any other time. With less than 10

SAC underground command post, Offutt AFB, Neb. 1965.

per cent of the defense budget, SAC furnished between 80 and 90 per cent of the nuclear firepower of the Free World (when measured in TNT equivalents).

Although still busy refining the ICBM force, SAC also gained new secondary missions in support of other U. S. Forces.

Welding such a diverse array of weapons and military tasks into a unified strategic force with a single paramount mission was the job facing General John D. Ryan when he assumed command of SAC in December 1964.

General Ryan was a long-time nuclear weapons expert. He had commanded every level of SAC combat unit from wing to numbered air force. As SAC director of materiel, he had worked on the early logistics planning for SAC's ICBM force. So, when General Power planned his retirement from the Air Force, General Ryan, then U. S. Air Force Inspector General, was an excellent choice to become SAC vice commander.

When General Power left the Air Force Nov. 31, 1964, General Ryan became commander in chief of the Strategic Air Command.





President John F. Kennedy meets a SAC Atlas crew. General Ryan is a strong believer in teamwork and efficient management.

Working closely with Air Force Chief of Staff General John P. McConnell (a former vice commander of the Strategic Air Command), General Ryan has emphasized SAC's relationship to Air Force leadership, while remaining the only specified command operating directly under the Department of Defense.

With its new and important support responsibilities, such a close relationship is a necessity. For example, in January 1961, SAC was made single manager for all Air Force air refueling.

Also, after years of possible nuclear targeting overlap between military services and complex coordination of nuclear war plans, in August 1960 General John D. Ryan and Vice President Hubert H. Humphrey.



Titan II maintenance.

Secretary of Defense Thomas Gates established the Joint Strategic Target Planning Staff at SAC headquarters. This multi-service staff was given the mission of continually preparing and maintaining a single integrated operational plan and national strategic target list for U. S. strategic nuclear forces. Because the great bulk of the intelligence work on the SIOP and NSTL is done by SAC people and equipment, and because the great majority of the weapons involved are in SAC, the director of JSTPS is the SAC commander in chief.

Finally, in June 1965, the Strategic Air Command took on the additional mission of bombing the Viet Cong. At the same time it maintained its combat aircraft on 50 per cent ground alert, a continual alert of some 800 ICBMs, and refueled

not only its own sorties but those of the USAF Tactical Air Command as well.

#### Refining the Missile Force

Transition between overlapping weapon systems was an old story to the men of the Strategic Air Command. But, the rapid buildup of the SAC ICBM force in the early sixties was beyond anything experienced before by any military service. During one period of more than a year, missiles were being added to the SAC force at the rate of one a day. From a token alert of early liquidfueled Atlas at Vandenberg AFB, Calif. in the first months of 1960, missile strength rapidly grew and spread to a wide array of SAC bases. The second liquid-fueled ICBM, Titan I, became operational at Lowry AFB, Colo., April 18, 1962, and the first flight of Minuteman solid-fuel ICBMs was declared combat ready at Malmstrom AFB, Mont., Dec. 11. By the end of that year, the entire planned Atlas force was on alert. By 1963, SAC was operating more than 600 Atlas, Titan and Minuteman ICBMs, including the new Titan II heavyweight, liquid-fueled ICBM. These had become operational at Little Rock AFB, Ark., in December.

Meanwhile, during the early sixties at Vandenberg AFB, SAC was training crews for all three missiles plus RAF crews for the Thor Intermediate Range Ballistic Missile program. At the same time the command was launching all these missiles in a complex program of test and proficiency launches.

By the end of 1964, the force had grown to over 850 operational missiles.

As Minuteman strength mounted, the complex, less efficient liquid-fueled ICBMs became obsolete after only a brief tour of duty. In November 1964, Secretary McNamara announced that the entire Atlas force and all Titan I missiles would be phased out during 1965.

B-58 refueled by a KC-135.



So, as SAC celebrated its 20th anniversary in March 1966, the Snark, Rascal, Thor, Jupiter, Atlas and Titan I missiles had all come and gone in just eight years.

Today, Titan II and Minuteman are on duty, with improved models of the Minuteman under development and programmed to modernize the entire 1,000 Minuteman ICBM force.

The tens of thousands of SAC men who were trained to man the rapidly growing missile force were largely drawn from units losing obsolete aircraft and being inactivated. Once again, the flexibility of SAC's professional manpower achieved what some experts had thought was impossible.

Men who had flown B-36s and B-47s were now commanding missile crews on alert. Maintenance men who had earned their stripes changing spark plugs on a wind-swept flight line were now handling exotic rocket fuels and trouble shooting inertial guidance systems with computers.

Missile combat crew duty was no less difficult and taxing than duty on a flight crew. Because operational sites are widely dispersed over remote areas, crews must either drive for hours in all kinds of weather to reach their launch control facilities or fly the distance by helicopter.

A missile combat crew duty tour runs for about 30 consecutive hours with 24 hours actually spent on alert below ground at control consoles. While on the job, the combat crew must supervise and monitor maintenance, communications, security and transportation activity in its area—in addition to its operations duties.

Only a few of these crews ever have the opportunity to fire a missile. Those that do, perform a no-notice proficiency launch at Vandenberg AFB.

If there ever was any doubt about the fact, it was proved in the 1960s that SAC's strength is in its people, as much as in its hardware.

### Refining the Bomber Force

As SAC's missile strength grew and sharpened, the other half of the mixed force, SAC's bombers, was far from static. During the first five years of the sixties, the supersonic B-58 became operational and the B-47 and KC-97 came to the end of their service after years on alert and millions of hours of flight.

But although present in the sixties in smaller numbers, SAC's bombers had greater potential than ever. In addition to the high speed B-58, SAC also gained improved models of the B-52 with greater range and better performance.

Most significant, aircraft with the extended performance of the B-52 made a new concept possible. This was the concept of an airborne alert—B-52 bombers would remain in flight 24 hours-a-day—invulnerable to a surprise missile attack.

After extensive training, such an airborne alert was available and was put into operation during the Cuban crisis.

The B-52 also gained a valuable new armament when the Hound Dog missile was added to the force in 1960. Two of these nuclear-armed missiles can be carried under the wings of each B-52. Capable of supersonic flight, the Hound Dog can reach out ahead of the bomber after being air launched at any altitude and can strike targets hundreds of miles in front or to either side of the bomber's course.

## **Bomber Flexibility**

The change in bomber tactics during this time matched the change in hardware. As Soviet defenses improved, particularly their "SAM" antiaircraft missiles, SAC's bombers began operating at altitudes below the limits of defense radars. Instead of attacking from about 40,000 feet, the Minuteman being installed in a Montana launcher, June 1963.



altitude visualized by the designers of the B-58, B-47 and B-52, all SAC bombers perfected the techniques of bombing targets from extremely low altitudes

When not on alert, combat crews flew their aircraft on simulated missions across the United States, making simulated bomb drops on radar scoring units, some on special railroad trains. Just as they would on actual strike missions, combat crews searched out their targets by radar and navigated only by the stars.

In periodic joint exercises with the North American Air Defense Command, SAC bombers also flew simulated attacks on the United States. During SAC's own operational readiness inspections and "Bar None" exercises, wing commanders had to prove without notice to a cold-eved SAC inspector general that their aircraft could be launched on simulated emergency war order missions and hit their targets. In addition, SAC aircraft continued their traditional overseas duty with reflex rotations to every quarter of the globe.

#### **Tactical Support**

SAC tanker crews began in 1964 to add a new type of task to their mission. This grew from the requirement to directly support other USAF air operations.

The first requirement had developed in the late fifties. After tests, SAC tankers began to refuel USAF Tactical Air Command fighters on their exercises and deployments. TAC had operated KB-29 and KB-50 tankers but these propellerdriven aircraft could not efficiently refuel the newer, faster "century series" fighters. SAC's KC-135s had been designed to refuel jets and were therefore ideal for the job.

So, when SAC in 1961 became "single manager" for all jet tankers, the TAC tankers were retired.

One example of such support occurred Oct. 20,



SAC KC-135 tanker refuels TAC fighter en route to Viet Cong targets in South Vietnam.

1962, when 53 KC-135s supported more than 100 TAC aircraft in exercise "Big Lift," the largest transoceanic air deployment in air history. In 1963 alone, SAC tankers refueled more than 9.500 TAC fighters and reconnaissance aircraft.

Then, as more USAF aircraft were deployed to support the South Vietnam forces under control of the Pacific Air Forces, SAC began supporting the deployment of these aircraft across the Pacific. And, when U. S. aircraft began to strike Viet Cong targets, SAC KC-135s refueled fighter-bomber and reconnaissance aircraft on these sorties, both on the way to targets and on return.

But, tactical support was not an exclusive tanker task for long. Although primarily armed with nuclear weapons, SAC had always retained an "iron bomb" capability. And, between March and June 1964, SAC B-52s and B-47s conducted a series of tests to sharpen their conventional bombing tactics.

Climax of the tests was a 5,200 mile, 14-hour non-stop strike of a B-52 from Castle AFB, Calif., against a small target island off the coast of Guam.

Then, in April 1964 SAC, for the first time, replaced its reflex B-47s on Guam with B-52 bombers. And, 14 months later other B-52s bombed Viet Cong targets.

#### Improved Reconnaissance

SAC, from the beginning, had stressed the importance of strategic reconnaissance. And, special models of the B-29, B-50 and B-47 had been developed for this highly specialized mission. In the sixties, however, special high-performance reconnaissance aircraft—not modified bombers—were widely operated for the first time by SAC and others were planned for the command in the future. A special adaptation of the B-58 also was





SAC Airborne Command Post.

created to add to the flexibility of this remarkable aircraft.

The potential in having a supersonic reconnaissance aircraft like the camera-equipped B-58 was dramatically demonstrated March 28-29, 1964, when two B-58s of the 43rd Bomb Wing flew from Texas to the scene of a tragic Alaskan earthquake and photographed the damage from low altitude. Within hours, the photographs were flown to Offutt AFB, Neb., for rapid processing and then to Washington for analysis. From first alert to delivery of finished prints to Washington took about 18 hours.

Earlier, it was a SAC reconnaissance aircraft which had first detected Soviet missiles in Cuba. And, a SAC reconnaissance pilot, Major Rudolf Anderson, Jr. of the 4080th Strategic Reconnaissance Wing, was the only American military man killed by enemy action during the Cuban crisis.

Following the Cuban crisis, President Kennedy presented a Unit Citation to the 4080th SRW WU-2 reconnaissance aircraft.

and stated that, "the 4080th contributed as much to the security of the United States as any unit in our history and any group of men in our history."

### Design and Coincidence in Crises

The new weapons, tactics and missions acquired by the Strategic Air Command in the early sixties needed practice, exercise and test to allow SAC crews and support people to become proficient. However, besides their training value, the timing or simple fact of a new SAC tactic or capability also had other value. It could carry great weight in the cold war. So, the significant accomplishments and milestones of the early sixties, like those in years before, contributed greatly to the effectiveness of U. S. foreign policy. Let's review the past five years and trace the record of world affairs and SAC activities.

Looking back to the spring of 1960, force refinement was the major concern for General Power.

B-58 reconnaissance photograph of Alaskan earthquake.



The massive build-up of the U. S. ICBM strength was still in the future, and the Soviet leader was threatening world peace in the United Nations. It was also that spring that the USSR set up its own separate ICBM service. And, SAC announced at nearly the same time establishment of an airborne command post, perpetually in flight near SAC headquarters and manned and equipped to command the mixed force, if necessary.

SAC accepted first delivery of the B-58 in August 1960 and just a month later one of the new supersonic bombers of the 43rd Bomb Wing placed first in crew bombing at the annual SAC bombing competition.

The B-58 made a further demonstration of its sensational performance in early 1961 as it broke six speed and payload records in one flight on Jan. 12, with speeds of over 1,000 miles per hour over a closed course. On Jan. 14, another B-58 broke three of these records again with a speed of over 1,200 miles per hour. The crew was awarded the Thompson Trophy for this remarkable flight.

Then, on May 10, a sustained speed record was broken by a 43rd Bomb Wing B-58 with a flight of 669.4 miles in 30 minutes 45 seconds—an average speed of 1,302 miles per hour. This won the pilot of the aircraft the Bleriot Cup.

Finally, on May 26, another B-58 flew 4,612 miles from New York to Paris in 3 hours, 14 minutes, 41 seconds, and set another record. The time was one-tenth of that taken by Charles Lindbergh in 1927.

In August 1961, the border between East and West Berlin was sealed by the infamous wall. During that summer, while Soviet Premier Khrushchev was boasting that he was developing a 100 megaton nuclear weapon, SAC achieved the 50 per cent alert status ordered by President Kennedy. That August, the Soviets began nuclear testing again and by October had exploded a



President Lyndon B. Johnson is briefed with the NATO Secretary General at SAC headquarters, Sept. 29, 1964. device more powerful than 50 million tons of TNT.

October 1962 was the period of the Cuban crisis. During that month, SAC forces of all types were active. Besides continued reconnaissance of the Cuban missile sites and Soviet shipping at sea, SAC B-47 bombers dispersed, according to plan, to civilian airfields, and B-52s began the first sustained full-scale airborne alert in aviation history—30 days of continual flight over 20,022,000 miles without an accident. On the missile side, those few missiles off alert for training or nearing operational status were quickly armed and placed on alert with the main missile force.

These actions in combination with those of conventional forces formed the strategic umbrella which helped diplomacy resolve the situation. Later, President Kennedy said at SAC Headquarters that SAC operations had, "contributed greatly to the peace and security of the United States."

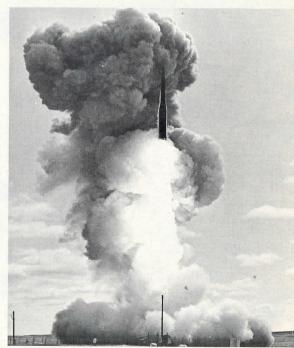
In December 1962, both Minuteman and Titan II became operational in the Strategic Air Command.

In August 1963, B-58s were deployed to overseas bases. And, Oct. 16, 1963, the B-58 Hustler

made a record 8,028-mile flight from Tokyo to London in 8 hours 35 minutes. Average speed was just under 1,000 miles per hour.

In 1964 SAC began shifting attention to the Far East as the Chinese Communists threatened increased crisis and aggression. It was in 1964 that the first Chinese nuclear device was exploded.

In April of that year, B-52s were sent to the Pacific for the first time while other B-52s were dropping conventional bombs in tests at Eglin AFB, Fla. That summer, President Johnson announced SAC would operate the SR-71 reconnaissance aircraft capable of flying three times the speed of sound at over 80,000 feet.



"Long Life": first ICBM test launch from an operational site.



B-52 drops 750-pound bombs on a Viet Cong stronghold.

In March 1965, as a test and demonstration of Minuteman missile capability, a SAC combat missile crew launched a missile from an operational site for the first time in operation "Long Life." The operational site near Ellsworth AFB, S.D., was loaded with a partially fueled missile, but other than for safety equipment, was identical to other ICBMs on alert. The launch, made in full view of press and other observers, was a complete success.

#### SAC in Southeast Asia

1965 was also the year that SAC stepped up its long time support of TAC fighter operations in Southeast Asia and the SAC combat crews dropped their first bombs on an enemy target in over 10 years. By the end of this year, SAC B-52s had flown more than 1,500 conventional bomb sorties against the Viet Cong, dropping more than 78,000 "iron" bombs—more than 63 million pounds,

Water-filled craters made by a B-52 strike against Viet Cong.

During 1965, SAC tankers off-loaded more than 314 million pounds of fuel supporting B-52s and Air Force fighter and reconnaissance aircraft in support of Southeast Asia operations.

The effect of SAC's bombing can be judged best by the men on the ground in South Vietnam. Following the close support bombing of Viet Cong positions in U. S. Marine Corps operation "Harvest Moon," the Marine commander, General L. W. Walt, said, "We are more than impressed with the results. We are delighted. The timing was precise, the bombing accurate and the overall effect awesome to behold." Later, General Walt added, "We are seeing at first hand the tremendous shock effect of the bombing. The enemy has abandoned his prepared positions and much of his equipment is in great confusion and this is making our part of the job easier. Many thanks for your wonderful support."

As the B-52 attacks continued in Vietnam and representatives of the United States were scattered world-wide in an attempt to find a way to negotiate peace with North Vietnam, Secretary of Defense McNamara announced Dec. 10, 1965, that Congress would be asked to authorize 210 new FB-111

bombers to be operational sometime in 1968. At that time, SAC would have a total of about 465 FB-111 and late model B-52 bombers to back up a missile force of about 1,000 ICBMs on alert.

As SAC entered its 21st year of operation, there was little comfort in store for the Communists in the future.

#### Management and Professionalism

The early 1960s were just as important to SAC's manpower and management as they were to the evolution of the mixed force. The growing Soviet missile and bomber threat, and tight fiscal control from the Air Force and Department of Defense called for streamlining SAC command and control.

SAC's numbered air forces were realigned in both 1955 and 1963 to best organize the support and control of the new mix of bombers and missiles. With the reorganization and the building of widely scattered missile facilities, new communications systems were added to the SAC command and control network. And, as the Soviet missile threat grew, the airborne command post and a back-up system of radio relay aircraft were set up to prepare for the worst possible emergency.





SR-71 reconnaissance aircraft

As SAC manpower and funds were reduced to allow the Air Force to build up its tactical air power, greater demands were made on SAC personnel than ever before.

Programs such as the "Big R" program to cut costs and improve the reliability of all SAC weapon systems and the Professional Results in Daily Effort program stressing dedication and flawless performance worked toward raising the efficiency of SAC manpower to its highest level.

When the Department of Defense asked all services to develop cost reduction programs, SAC, as always, led the Air Force in savings by combining cost reduction with "Big R." By 1964, for example, SAC had adopted 4,402 suggestions from its personnel recommending ways to improve reliability and save money. Such response from the rank and file SAC men enabled the Strategic Air Command to achieve 1,000 per cent of its assigned cost reduction goal for 1964 with validated savings of \$165 million. The 1965 goal was set at over \$140 million.

The record of the Strategic Air Command in such programs is evidence that professionalism is not the exclusive quality of SAC combat crews. Instead, it extends to every part and every man in the command.

Artist's conception of the FB-111.

Over the years, intensive training, great responsibility, frequent hardships and intensive quality control have made the men of SAC one of the most elite military corps in history.

Their objective is perfection and no standard of performance is allowed to stand for long. For example, almost every year of SAC's 20 years of service has seen records fall, and past performance exceeded.

Today, SAC's flying accident rate is the lowest

in the command's history. Each year bombing and navigation accuracy, as evidenced by the annual Bombing and Navigation Competition, has been better than ever before. Each year costs are down, reliability is up, performance improves in almost every area.

This tireless drive for perfection is the mark of the professional. And, it has characterized the men of the Strategic Air Command since March 21, 1946.



# SAC Outstanding Events—A Selected List

- 1946 Strategic Air Command established at Bolling Field, March 21, 1946; General George C. Kenney assumed command in October 1946.
- 1948 Lieutenant General Curtis E. LeMay succeeded General Kenney as SAC commander in October 1948.
- 1948—The B-36 and B-50 were introduced into the SAC inventory.
- **1948** SAC moved to Offutt AFB, Neb., Nov. 9, 1948.
- 1948—First in-flight refueling in an organized mission was accomplished.
- 1949 First nonstop around-the-world flight by a B-50, "Lucky Lady II."
- 1950—SAC units participated in Korean conflict combat operations.
- 1951 Overseas base-complex expanded with establishment of units in England and French Morocco.
- 1953 Progressive integration of B-47s into SAC operational inventory: 306th Medium Bomb Wing first unit to be equipped with B-47s.
- 1955—93rd Heavy Bomb Wing received first B-52s.
- 1957 General Thomas S. Power became CINCSAC in July 1957.
- 1957 First KC-135 delivered to 93rd Air Refueling Squadron in June 1957.
- 1957—"Power Flite," nonstop around-the-world flight of three B-52s, Jan. 16-18, 1957.
- 1957—SAC was given responsibility for initial operational capability of 1965—All Atlas and Titan I missiles were phased out by June 25, 1965. ICBMs.
- 1957 Reflex operation established in Morocco, July 1957.

- 1957—Alert concept of one third of bombers on minimum reaction alert instituted.
- 1958 Initiation of heavy bomb wing dispersal.
- **1958** First B-52 airborne alert test, September 1958.
- 1959 Atlas ICBM declared operational by CINCSAC Sept. 9, 1959.
- 1960—CINCSAC accepted first operational B-58, Aug. 1, 1960.
- 1960—Joint Strategic Target Planning Staff was created Aug. 17, 1960.
- 1961 Approximately 50 per cent of the bomber fleet was placed on ground alert, July 15, 1961.
- 1961 Numerous international records were established by B-58s in early 1961.
- 1961 Formal establishment of the airborne command post at Offutt AFB Feb. 14, 1961.
- 1962 Cuban crisis of October-November 1962 saw SAC demonstrate its massive mixed power which formed the strategic umbrella for successful resolution of the situation.
- 1964 General John D. Ryan became CINCSAC effective Nov. 30, 1964.
- 1965—SAC entered the Vietnam War with first B-52 raid over Vietnam. June 18, 1965.
- 1965—"Long Life" launch of Minuteman at Ellsworth AFB March 1, 1965, was first ICBM to be fired at an operational field site.

